



U.S. Environmental Protection Agency

Superfund Law and Procedures for sediment sites

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CERCLA

Comprehensive Environmental Response and Liability Act (“Superfund”)

- 1. History & background**
- 2. Evaluations & Investigations**
- 3. Decision process**
- 4. Post-decision activities & legal considerations**

	“SUPERFUND”	Natural Resource Damages
Goal	Cleanup	Restoration/ Compensation
Focus	Public health, welfare & environment	Natural Resources
Cleanup Funding	EPA or Responsible Parties	Responsible Parties
Federal lead	U.S. EPA	U. S. Fish & Wildlife Service

Kalamazoo River "Trustees"

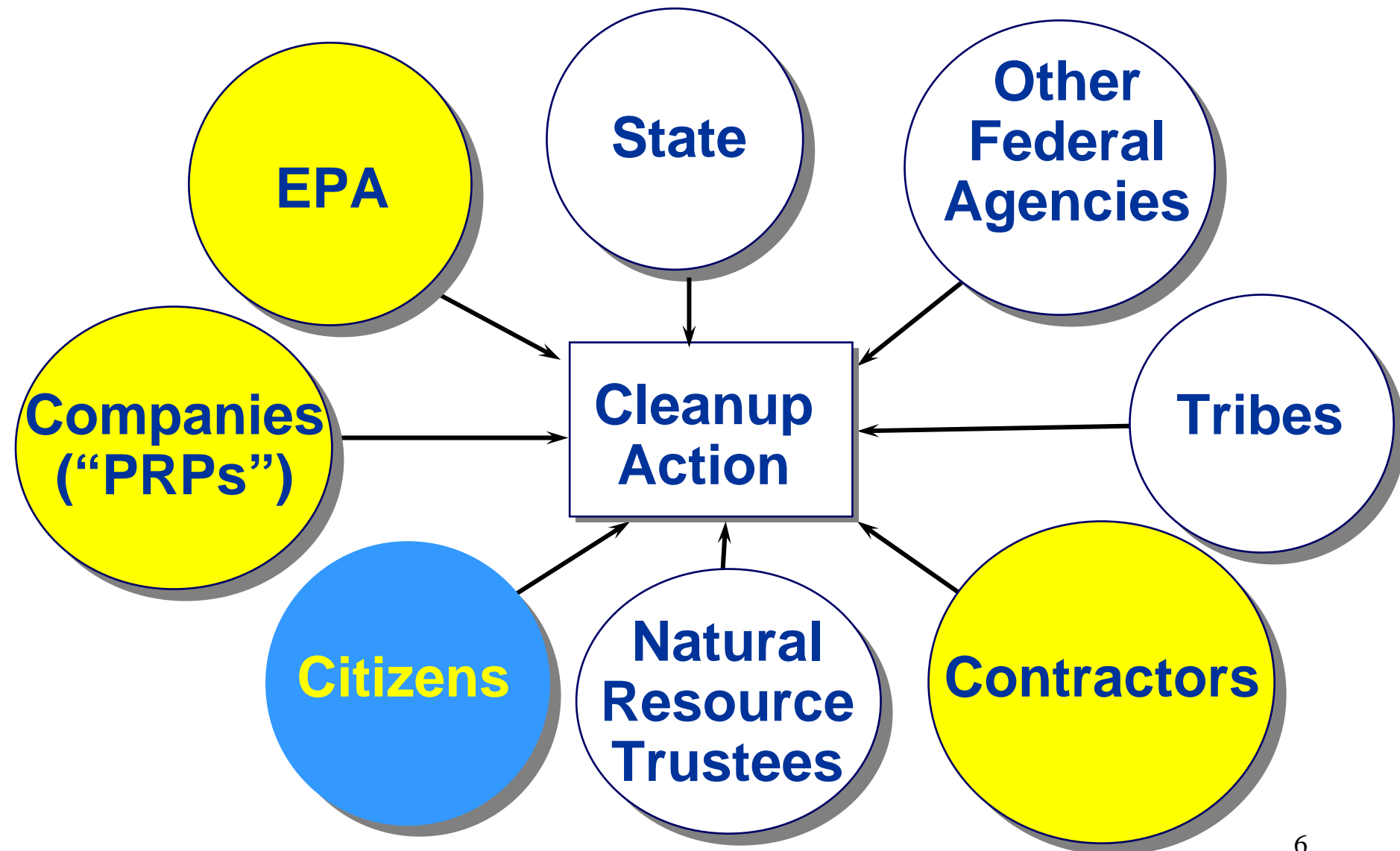


Department of
Attorney General

Kalamazoo River Cleanup



Superfund Participants



Superfund

- **Federal authority (EPA)**
- **Identifies sites with chemical risks to humans or wildlife**
- **Site cleanup**
- **Potentially Responsible Parties (PRPs) pay for cleanup**

Origin of Superfund

- **Late 1970's & early 1980's: several sites gained national attention**
 - Love Canal, New York
 - “Valley of Drums” (Brooks, Kentucky)
- **1980: U.S. Congress passed “Superfund”**
- **1986: National Contingency Plan – provides details of Superfund Process**

Superfund

Basic principles

- **Decisions based on science and engineering**
- **Decision basis in official written record**
- **Community involvement**

Superfund

Basic principles

- **Potentially Responsible Parties (PRPs) pay for cleanup**
- **Risk management program (not “restoration”)**

Superfund

- **“Emergency” or time critical risk**
 - **“Imminent and substantial endangerment”**
 - **Quick evaluation & fast action**
 - **On-Scene Coordinator**
- **Longer-term risks**
 - **More thorough investigation and evaluation**
 - **Generally larger & more complex than “time critical” sites**
 - **Remedial Project Manager**

Superfund Sites

- **Abandoned warehouses**
- **Manufacturing facilities and processing plants**
- **Landfills**

Superfund Sites

(continued)

- **Contaminated rivers and lakes**
- **Mines**
- **Military facilities**
- **Emergency situations (e.g., truck/rail spills, tire fires)**

Who Cleans Up Sites?

- **PRPs**
 - **Contractors usually do work**
 - **EPA oversight**
- **EPA: if no “responsible parties”**

Superfund - what happens?



1. Define problem
(sampling, etc.)

2. Evaluate possible
solutions

**3. Final decision after
public input**

4. PRPs do cleanup



Remedial Investigation

(defines problem)

- **General background**
- **Sampling and analysis –extent of contamination**
- **Risk Assessment: determines current risks to humans and wildlife**

Feasibility Study

(evaluates cleanup options)

- **Determine cleanup levels**
- **Screen alternatives**
- **Detailed and comparative analysis of alternatives - 9 criteria**

Feasibility Study

9 Criteria

Threshold Criteria

- 1. Protection of human health and the environment**
- 2. Compliance with Applicable or Relevant and Appropriate Requirements (“ARARs”)**

Feasibility Study

9 Criteria

Balancing Criteria

3. Implementability
4. Long-term effectiveness
5. Short-term effectiveness
6. Treatment preference
7. Cost effectiveness

Feasibility Study

9 Criteria

Modifying Criteria

8. State acceptance

9. Community acceptance

9 Criteria Evaluation – Fox River OU 1

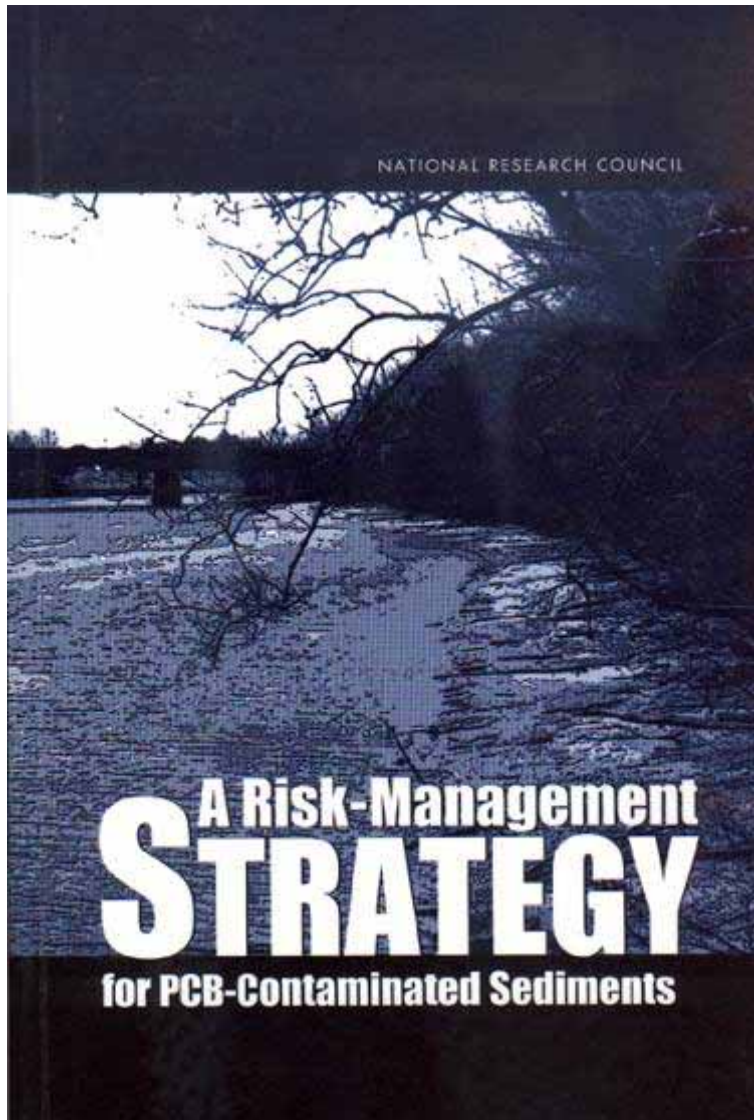
Operable Unit 1. Little Lake Butte des Morts

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More process stuff for
large sediment sites...

- **Contaminated Sediment Technical
Advisory Group (CSTAG)**
- **Remedy Review Board**

Contaminated Sediment Technical Advisory Group (CSTAG)



- **CSTAG & 11 *Sediment Principles* grew out of National Research Council 2001 report**
- **<http://books.nap.edu/catalog/10041.html>**

Contaminated Sediment Technical Advisory Group (CSTAG)

- **Sediment sites**
 - Large
 - Controversial
 - Complex
- **Consistency with *11 Sediment Principles***
- **EPA review panel**
 1. Remedial Project Managers (10 EPA regions)
 2. Headquarters
 3. Office of Research and Development

CSTAG Process

- 1. Region submits memo to review panel**
 - Early in RIFS
 - Memo addresses *11 Sediment Principles*
- 2. Site visit and meeting**
 - Site tour
 - Review of site characteristics, history, etc.
 - Stakeholder dialogue
- 3. CSTAG comments incorporated with
Remedy Review Board comments**

Superfund

11 Risk Management Principles

- 1. Control sources early**
- 2. Involve community early and often.**
- 3. Coordinate with States, local governments, Tribes and Natural Resource Trustees**
- 4. Develop and refine a conceptual model considering sediment stability**

Superfund

11 Risk Management Principles

- 5. Use iterative approach in a risk-based framework**
- 6. Evaluate assumptions and uncertainties associated with Site characterization data and Site models**
- 7. Select site-specific approaches to achieve risk-based goals**

Superfund

11 Risk Management Principles

- 8. Ensure cleanup levels are tied to risk goals**
- 9. Maximize effectiveness of Institutional Controls and recognize limitations.**
- 10. Design remedies to minimize short-term goals while achieving long-term protection**
- 11. Monitor during and after remediation to assess and document remedy effectiveness**

Remedy Review Board

- **For remedies with costs more than \$30 million**
- **The “Board”**
 - **20 senior management, technical and/or policy experts**
 - **EPA HQ, Research, and 10 regional offices**

Remedy Review Board

- **EPA region provides information to the “Board”**
 - **Site history & contamination description**
 - **Risk Assessment**
 - **Cleanup alternatives**
 - **Preliminary Proposed Plan**
- **Review occurs prior to Proposed Plan**

Remedy Review Board

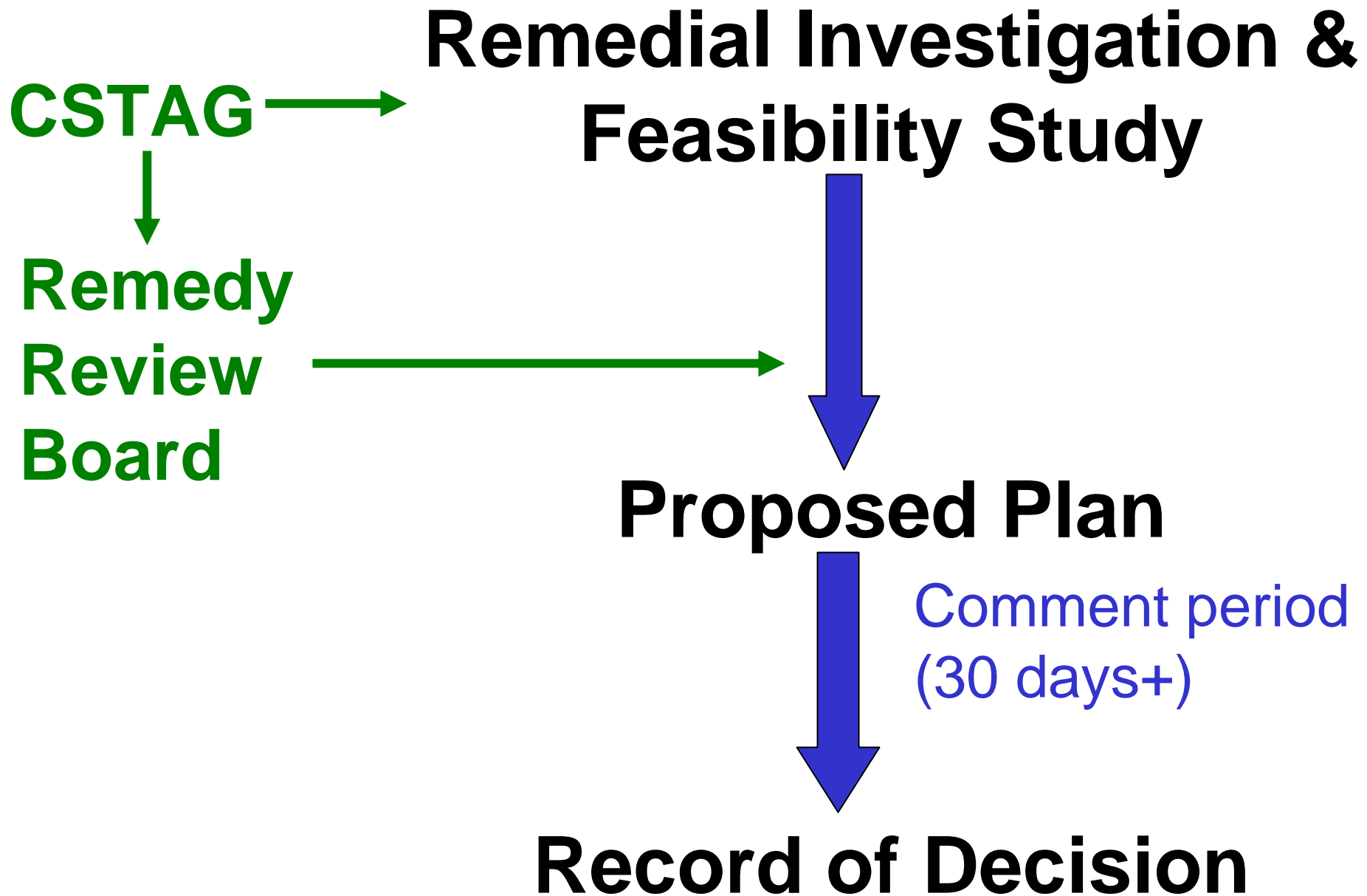
- **PRPs, TAG, Trustees, and State can submit comments**
- **Board meeting: EPA and the State attend**
- **Board makes advisory comments to region**

Proposed Plan

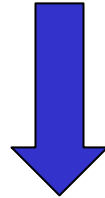
- **Agency's preliminary recommendation for site cleanup**
- **Summary of Remedial Investigation and Feasibility Study**
- **Solicits public input**

Record of Decision

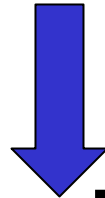
- **After consideration of public comments on Proposed Plan**
 - All substantive comments responded to in Responsiveness Summary
 - Proposal sometimes changed in response to comments
- **Summary of investigations**
- **Administrative Record documents basis for decision**
- **Agency's final decision**



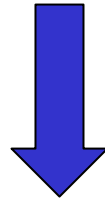
Record of Decision



**Consent Decree or
Unilateral Administrative Order**



Design



Cleanup
(PRPs or EPA)

Settlement & Negotiations

- **Record of Decision: basis for settlement discussions - decision not negotiable**
- **Consent Decree - settlement agreement to implement the Record of Decision**
- **Administrative Order - option if negotiations unsuccessful**

Legal Issues – Superfund

Possible Legal Challenges

- **Compliance with National Contingency Plan (NCP)**
- **“Arbitrary and capricious”**
- **Record Review if challenged: based on Administrative Record**

Legal Issues - Superfund

- **Responsible parties liable - even if actions were legal**
- **Joint and several liability**
- **Strong preference for settlement and voluntary action - court cases rare**